





WORLD INTELLECTUAL PROPERTY ORGANIZATION PCT

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT) (51) International Patent Classification 6: WO 99/61050 (11) International Publication Number: A61K 39/00, 39/02, 39/108, C07H 21/02, A1 2 December 1999 (02.12.99) (43) International Publication Date: 21/04, C12N 15/00, 15/20, C12P 21/06, 21/04 (81) Designated States: CA, JP, US, European patent (AT, BE, CH, PCT/US99/11585 (21) International Application Number: CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). (22) International Filing Date: 26 May 1999 (26.05.99) Published (30) Priority Data: 29 May 1998 (29.05.98) US With international search report. 60/087,308 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of

(71) Applicant (for all designated States except US): MERCK & CO., INC. [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): EL-SHERBEINI, Mohamed [EG/US]; 126 East Lincoln Avenue, Rahway, NJ 07065 (US). AZZOLINA, Barbara [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065 (US).
- (74) Common Representative: MERCK & CO., INC.; 126 East Lincoln Avenue, Rahway, NJ 07065 (US).

amendments.

(54) Title: MURD PROTEIN AND GENE OF PSEUDOMONAS AERUGINOSA

(57) Abstract

This invention provides isolated polynucleotides that encode the MurD protein of Pseudomonas aeruginosa. Purified and isolated MurD recombinant proteins are also provided. Nucleic acid sequences which encode functionally active MurD proteins are described. Assays for the identification of modulators of the of expression of murD and inhibitors of the activity of MurD, are also provided.